



## UNITED STATE DEPARTMENT OF COMMERCE **United States Patent and Trademark Office**

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Washington, D.C. 20231

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE **THOMPSON** 09/575,551 05/22/00 R P97-0041US3 **EXAMINER** 022249 PM82/0511 LYON & LYON LLP KEENAN.J ART UNIT PAPER NUMBER **SUITE 4700** 633 WEST FIFTH STREET LOS ANGELES CA 90071-2066 3652 DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

05/11/01

## Office Action Summary

Application No. 09/575,551

Apphocht(s)

Thompson et al

Examiner

Keenan

Art Unit 3652



The MAILING DATE of this communication appears	on the cover sheet with the correspondence address
communication.  - Failure to reply within the set or extended period for reply will, by	FR 1.136 (a). In no event, however, may a reply be timely filed
Status  1) Responsive to communication(s) filed on 3/5/01	
2a)   ✓ This action is <b>FINAL</b> . 2b)   ✓ This ac	tion is non-final.
3) Since this application is in condition for allowance closed in accordance with the practice under Ex pa	except for formal matters, prosecution as to the merits is arte Quayle, 1935 C.D. 11; 453 O.G. 213.
Disposition of Claims	
4) 💢 Claim(s) <u>56, 57, 62, 64, and 65</u>	is/are pending in the application.
4a) Of the above, claim(s)	is/are withdrawn from consideration.
5) Claim(s)	is/are allowed.
6) 💢 Claim(s) 56, 57, 62, 64, and 65	is/are rejected.
7) Claim(s)	is/are objected to.
8)	are subject to restriction and/or election requirement.
Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are  11) The proposed drawing correction filed on  12) The oath or declaration is objected to by the Exam	is: a) □ approved b) □ disapproved.
	ve been received.  ve been received in Application No  locuments have been received in this National Stage eau (PCT Rule 17.2(a)).  ne certified copies not received.
Attachment(s)	
15) Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)  17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	19) Notice of Informel Patent Application (PTO-152)  20) Other:

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1. The application papers filed in this application indicates that it is a continuation of copending application SN 08/845,662. This is incorrect, as that application, which issued on 10/12/99 to Kent, neither is copending nor has common inventorship.

Regarding applicant's comments, it is true that the continuing data information listed on the preliminary amendment is correct; however, it is the filing papers themselves which contain the incorrect information and to which the examiner is referring. Because of this, the bibliographic data sheet is incorrect; applicant may wish to review the filing receipt.

2. The amendment filed 3/5/01 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention.

The added material which is not supported by the original disclosure is as follows: the recitation in claim 65 that the transfer robot is moved in a direction perpendicular (laterally) to the first direction. Although it is true that this feature is shown in figures 1, 13 and 14, it is not shown in figure 49 or otherwise disclosed with respect to the embodiment of figures 40-49 to which the claims are limited.

Applicant is required to cancel the new matter in the reply to this Office action.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the transfer robot moved in a direction

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perpendicular (laterally) to the first direction (claim 65) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 5. Claim 65 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. See paragraph 2 above.
- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 56-57, 62, and 64-65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 56 and 65, the recitation "and similar article(s)" renders the claims indefinite because it is unclear what articles are part of the claimed invention.

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8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the

manner in which the invention was made.

9. Claims 56-57, 62, and 64-65 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Iwai et al in view of Kawabata.

Iwai et al show a semiconductor processing method including moving a sealed container

30 to an enclosed workspace having an interface port 14, then to a docking station for receiving

the container where the container is unsealed by removing a panel thereof, engaging an article in

the container with engagement head 42 and placing the article onto a shelf 46, lifting the article

from the shelf with a transfer robot comprising carriages 28, 47, and 50 which carry the

workpiece to a process chamber 1, opening the process chamber, placing the article into the

process chamber, closing the chamber, and processing the article.

Iwai et al do not show moving the article from a horizontal to a vertical orientation.

Kawabata shows a wafer transfer apparatus including arm 10 for pivoting a wafer carrier

C1 about a horizontal axis such that the wafers therein are moved from a horizontal to a vertical

orientation prior to the wafers being removed therefrom.

It would have been obvious for one of ordinary skill in the art to have modified the

apparatus of Iwai et al by moving the article from a horizontal to a vertical orientation as the

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engagement head transferred the article from the docking station to the shelf, as Kawabata teaches that moving wafers in a carrier from a horizontal to a vertical orientation prior to their processing is well known in the art, as certain processes are desirably performed on wafers in a vertical orientation.

Re applicant's arguments, although Kawabata may not show the same type of relay for performing the reorientation of the wafers, the relevant aspect of Kawabata is that the reference supports the showing that moving wafers from a horizontal to a vertical orientation would have been a desirable modification to the apparatus of Iwai et al. The relay mechanism of Iwai et al, being a multi-jointed robotic arm, clearly has the capability to move the wafer carrier such that the wafers therein would be oriented vertically. Thus, modifying Iwai et al as suggested would have required no undue experimentation and produced no unexpected results.

Re claim 65, although new matter limitations are not accorded patentable weight, it is generally well known in the art to provide a lateral movement capability to a wafer cassette handler to accommodate plural processing chambers, and thus the further modification of Iwai et al to include such a feature, to whatever extent it is considered a patentable limitation, would have been merely an obvious design expediency to one of ordinary skill in the art.

10. Applicant's arguments filed 3/5/01 have been fully considered but they are not persuasive. See paragraph 9 above.

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11. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time 12.

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date

of this final action.

Any inquiry concerning this communication or earlier communications from the examiner 13.

should be directed to James Keenan whose telephone number is (703) 308-2559.

jwk

May 9, 2001

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